

ABSTRACT OF DISCLOSURE

In an image display device, assuming a distance between electron sources and control electrodes as L_{kg} , a distance between the control electrodes and acceleration electrodes as L_{12} , a thickness of opening holes formed in the control electrodes as T_{g1} and a short diameter of the opening holes formed in the control electrodes as FG_1 , the acceleration electrodes satisfy the relationship $(L_{kg} + T_{g1} + L_{12}/2)/FG_1 \geq 0.25$, assuming a thickness of the opening holes formed in the acceleration electrodes as T_{g2} and a short diameter of the opening holes formed in the acceleration electrodes as FG_2 , the acceleration electrodes satisfy the relationship $T_{g2min} \leq T_{g2} \leq T_{g2max}$ and the relationship $T_{g2min} = 2.98FG_2 - 0.04$, assuming $FG_2 < 0.109$, the acceleration electrodes satisfy the relationship $T_{g2max} = 0.02/(0.115 - FG_2) - 0.06$, and assuming $FG_2 \geq 0.109$, the acceleration electrodes satisfy the relationship $T_{g2max} = 0.03/(FG_2 - 0.1) + 0.045$. Due to such a constitution, the light emission control can be easily performed and the self-alignment of the electron sources and the control electrodes can be realized whereby the reduction of manufacturing cost and the tolerance in manufacture can be enhanced.